

REMARKS

The specification has been amended. Claim 4 has been amended. No new matter has been added. Claims 1-4 remain in the application. Reconsideration and reexamination is respectfully requested.

In the paper dated 05/20/2005, the specification was objected to. The paragraph entitled Cross Reference to Related Application has been amended to specify the issued patent number for application number 09/134,145.

In the paper dated 05/20/2005, claims 1-4 were rejected under 35 U.S.C. § 112, first paragraph. The examiner asserts that there is no support in the specification for "pattern of merge bits", or "merge bits", or "selecting merge bits." Applicant traverses.

From the specification, background section, page 4, lines 10-13 (emphasis added): "An additional 3 bits, called merge bits, are inserted between the 14-bit table patterns to merge the end of one pattern to the beginning of the next pattern. With appropriately selected merge bits, the resulting channel bits satisfy the (2,10)-RLL requirement and satisfy the DSV requirement."

In the paper dated 05/20/2005, claims 1-4 were rejected under 35 U.S.C. § 112, second paragraph. The examiner asserts that "transmitting decryption data" and "decryption data" are confusing and unclear, asking whether decryption data is the same as clear text. Applicant traverses.

From MPEP 2173, for 35 U.S.C. § 112, second paragraph, definiteness must be determined in light of (a) the content of the particular application disclosure, (b) the teachings of the prior art; and (c) the claim interpretation that would be given by one possessing the ordinary skill in the pertinent art at the time the invention was made.

When data is decrypted, one gets back the original data. There is no such thing as decrypted data. Decryption data is data used to decrypt encrypted data. Examples of decryption data include a key, a location of a key, or instructions used to decrypt encrypted data or to unscramble scrambled data.

From the specification, at page 7, lines 1-4: "For each of the embodiments, the original data can be accurately recovered, but other encoders will likely encode the same original data into channel bits that cannot be recovered, or other encoders will encode the

same original data into channel bits that don't include key decryption or descrambling information." Note that decryption or descrambling information is different than original data.

From the specification, at page 9, lines 5-7: "In a third embodiment of the invention, additional information is encoded by encoder 108 and decoded by decoder 124. The additional information is used for decryption, descrambling, or other data modification." Again, decryption information is additional information.

Finally, in U.S. Patent Number 6,278,386, the parent of the present application, claim 1 specifies encoding first data within second data, claim 2 specifies that the first data is used to modify the second data, and claim 3 specifies that the first data is "decryption data".

In the paper dated 05/20/2005, claim 4 was rejected under 35 U.S.C. § 101 as allegedly lacking utility, citing a lack of hardware. Although no legal authority has been cited requiring a method step to be executed by hardware, claim 4 has been amended.

In the paper dated 05/20/2005, claims 1, 3, and 4 were rejected under the judicially created doctrine of obviousness-type double patenting over claims 1, 2 and 4 of U.S. Patent Number 6,278,386. Applicant traverses. The rejection of claim 1 violates 35 U.S.C. § 121. See MPEP 804.01. Claims 3 and 4 of the present application specify merge bits, an element not present in claims 1, 3, and 4 of U.S. Patent Number 6,278,386. The examiner has presented no evidence of equivalence between channel bits and patterns of sign bits to merger bits, or why one would modify the previous claims to include merge bits.

In the paper dated 05/20/2005, claims 1-4 were rejected under the judicially created doctrine of obviousness-type double patenting over claim 1 of U.S. Patent Number 5,828,754. Applicant traverses. The rejection of claims 1 and 2 violates 35 U.S.C. § 121. See MPEP 804.01. Regarding claims 3 and 4, no prima facie case for obviousness has been established. Claims 3 - 4 of the present application specify merge bits, an element not present in claim 1 of U.S. Patent Number 5,828,754. The examiner has presented no evidence of why one would modify the previous claims to include merge bits.

In the paper dated 05/20/2005, claims 1-4 were rejected under 35 U.S.C. § 103(a) as obvious over EP 0347934 (Sako). Applicant traverses. Claims 1 - 4 specify data encoded in merge bits. Sako (cited by the applicant) discloses merge bits, the existence of which

applicant also discussed in the background section of the application. Sako does not teach or suggest encoding data in the merge bits. The examiner cites Sako, fig. 3, and page 3, lines 43-56, page 4, lines 1-54, and page 5. None of the cited text teaches or suggests encoding data in merge bits.

Entry of this amendment is respectfully requested. This application is considered to be in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

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